Order of operations (1)

Use knowledge of the order of operations to carry out calculations involving the four operations

Challenge 1

Use the BODMAS rule to work out the answers to these calculations.

a 6 + (13 – 4)
b 5 + (19 – 3)
c 6 + (15 – 5)
d 8 + (14 – 6)
e 7 + (14 – 8)
f 10 – (4 + 2)
g 20 – (9 + 5)
h 20 – (8 – 2)
i 2 × (5 + 4)
j 5 × (7 + 4)
k 5 × (18 – 8)
l 10 × (3 + 6)

Rule

The order of operations is:

B Brackets
O Orders (e.g. 4^2)
DM Division and Multiplication
AS Addition and Subtraction

The way to remember this is: **BODMAS**

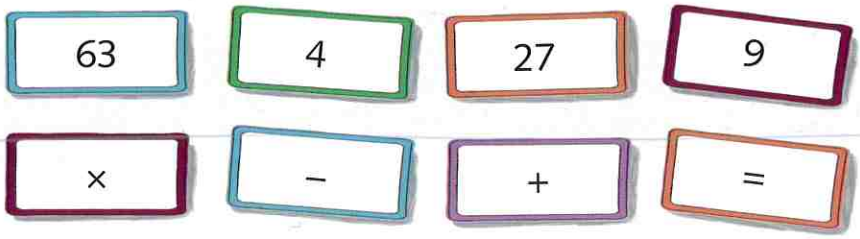
Challenge 2

1 Use the BODMAS rule to work out the answers to these calculations.

a 6 × 4 + 45
b (9 + 4) × 10
c 92 – (10 × 5)
d 12 ÷ 3 + 18
e 12 × 12 + 9
f 10 × 4 ÷ 2
g 160 – 5 × 6
h 250 – 100 ÷ 2
i 69 – 4 + 9 + 15
j (56 + 56) + 8 ÷ 2
k (32 + 46) × 5 × 2
l (18 – 2) × (4 + 3)

2 Design a poster to help you remember the BODMAS rule. Make it memorable for you!

3 Using the numbers and operations below, with either one or two sets of brackets, how many different answers can you make?



1 Write out each calculation twice. In each one, put brackets in a different place so each gives a different value.

a $15 - 4 \times 2$

b $9 \times 4 + 6$

c $12 \div 2 + 4$

d $4 + 6 \times 7$

e $22 + 3 \times 4$

f $5 \times 2 \times 3 + 4$

g $13 + 24 \times 3 - 15$

h $25 - 43 - 17 + 9$

i $12 \times 6 + 5 \div 10$

j $100 \div 4 \times 3 - 21$

2 Fill in the missing numbers.

a $4 \times \quad - (\quad - \quad) = 80$

b $4 \times \quad + 4 \times 4 = 80$

c $4 \times (\quad \times \quad) \times \quad = 80$

d $4 \times \quad - (4 \times \quad) - (\quad \times \quad) = 80$

3 Fill in the missing numbers.

a $6 \times (\quad + \quad) \times \quad + (\quad - \quad) = 200$

b $6 \times \quad - (\quad - \quad) = 200$

c $6 \times \quad - (6 \times \quad) - (\quad \times \quad) = 200$

d $6 \times (\quad \div \quad) + (\quad + \quad) = 200$